

TCT@ACC-i2: Invasive and Interventional Cardiology

MULTICENTER REGISTRY DATA IN JAPAN FOR RETROGRADE PCI OF CHRONIC TOTAL OCCLUSION DURING THE PAST THREE YEARS: HAVE NEW DEVICES AND TECHNIQUES CHANGED THE STRATEGIES OF RETROGRADE APPROACH?

Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 3:45 p.m.-4:30 p.m.

Session Title: Chronic Total Occlusions

Abstract Category: 44. TCT@ACC-i2: Coronary Intervention, CTO

Presentation Number: 2103-237

Authors: Ryohei Yoshikawa, Etsuo Tsuchikane, Toshiya Muramatsu, Shigeru Nakamura, Atsunori Okamura, Yasumi Igarashi, Tetsuo Matsubara, Tsutomu Fujita, Makoto Muto, Masahisa Yamane, Sanda City Hospital, Sanda, Japan

The aim of Retrograde Summit is to clarify the clinical results which specialize in percutaneous coronary intervention (PCI) for chronic total occlusion (CTO) by retrograde approach.

1166 cases have been registered by 28 hospitals in Japan from 2009 to 2011. We compared successful CTO cases regarding collateral channels, guidewires, and CTO strategies by year. We also observed retrograde procedural success and overall procedural success during these years.

There are no significant differences of procedural success and complication rates in these 3 years. The most performed technique for CTO crossing was Reverse CART, however the rate of retrograde wire crossing without CTO dilation has been increasing since newly designed guidewires were introduced. Furthermore there is a tendency for decreasing procedure time and fluoroscopic time. The following table shows some changes.

The most common factor for failed retrograde approach was not being able to cross the channels with a guidewire. However, the crossing collateral channel rate was unchanged throughout 3 years despite the usage of CTO dedicated device by retrograde approach. Since retrograde approach has expanded the possibility of CTO treatment and was employed for challenging CTO cases, establishing treatment strategies before attempting the procedure would be a key point to successful procedures. We need to select the channel carefully and cross the CTO with certainty to improve procedural success rates.

	2009 (378)	2010 (423)	2011 (365)	P value
Successful collateral channel cross	80.4%	83.9%	82.5%	NS
- Septal	68.7%	58.3%	66.3%	0.0642
- Epicardial	27.4%	36.9%	30.3%	
- Bypass	4.0%	4.8%	3.3%	
Successful CTO cross	70.6%	74.0%	73.2%	NS
- Reverse CART	41.8%	66.5%	57.0%	<0.0001
- CART	11.8%	1.6%	1.5%	
- Retrograde wire cross	24.0%	22.0%	30.9%	
- Kissing wire technique	22.4%	9.9%	10.7%	
Contrast dose (ml)	315.7±138.7	299.2±135.9	291.4±127.1	0.0526
Fluoroscopic time (min)	98.7±54.9	91.9±49.0	94.3±43.2	0.1884
Procedure time (min)	203.3±84.4	187.9±84.1	190.0±80.9	0.0556